

whom the natives called "one fellow Adam-Adam" and who had saved the lives of the two Americans, a plantation was started at Berandi. The fiancé died of fever and the girl married the Polynesian. Wild and tough Malaita bushmen were imported as indentured laborers and disciplined with the aid of lash and gun. Jack London got his story directly from the shipwrecked American woman.

In 1928, when Dr. Paravicini stopped at that plantation, he met a good-looking young woman, armed with a gun and a heavy whip, bossing a gang of Malaita men. She invited him to dinner, and soon appeared dressed as a lady in up-to-date European style. She managed the place alone and handled the crew of tough Malaita men, who worked well for her. This girl seems to have been the daughter of London's heroine, who with the Polynesian father had died some years before and left her to manage the estate.

Dr. Paravicini found 2 new subspecies of *Papuina* and 3 new species and 5 new subspecies of *Placostylus* in the Solomons; these were described by Dr. Rensch. I found 2 new species and 2 new subspecies of *Papuina* and 4 new species and 1 subspecies of *Placostylus*, which were described by Wm. J. Clench.

After the war, if conditions permit, a great deal of work in the line of biological explorations in the Solomons awaits accomplishment. The birds and the butterflies have been quite well studied, but the botany and the land snails of the mountainous interior are still but little known.

ABUNDANCE-AREAS OF *MESODON PENNSYLVANICUS* (GREEN)

By GLENN R. WEBB

During approximately six years of casual collecting in eastern Marion County (Warren Township), Indiana, it has become evident that the land snail *Mesodon pennsylvanicus* (Green) exhibits extreme variations in abundance in this area—it being rare¹ in most localities but abundant at a few. It is the purpose of this

¹ One finds less than one *pennsylvanicus* to 25 specimens of other Polygyrids, hence, an estimated abundance-ratio of 1/25.

paper to commence a catalogue of the previously reported abundance-areas² of the species, to describe two seemingly new areas, and to cite information of possible use in the location of other such elsewhere.

Among the limited number of reports of areas where *pennsylvanicus* occurs in any degree of commonness whatsoever, but two indubitable records of abundance-areas are known to me. One of these is the Ohio record of Call (1900) who wrote: "Around Cincinnati, in favorable localities, it is common, a hundred being collected in one spot a few feet square in a single afternoon." The other is that discovered at some locality near Monroe, Michigan by the late Sister Catherine of the convent near there.³

As has been stated, two abundance-areas have been found in eastern Marion County, Indiana. Since these areas are both located near Indianapolis, they lie within the region where the species has been called common by Stein (1881). However, the Stein data does not seem to necessitate reporting these areas as other than new.

One of these areas comprises a segment of the former right-of-way of the Indianapolis & Cincinnati Traction Company between Kitley Avenue and Sears Avenue. The entire segment, however, is not populated by the species, for only in certain parts have the ecologic forces of the region been allowed to run their course and commence reforestation with a stand of saplings. Another of the more obvious factors influencing the ecologic development is the presence of Lick Creek and its tributary, Little Lick Creek, which together meanderingly parallel⁴ the segment as one stream.

Three snail-collecting localities have been recognized in this area: (1) Loc. R, situated just southwest of the cite of the Brookville Road underpass of the former electric-railway; (2) Loc. RR, that part of the right-of-way from the underpass at the Indianapolis-Rushville section of the P.C.C. & St. L. Railroad⁵ to Broadhead Road; and (3) Loc. RR-1, that portion from Broadhead Road north to the banks of Little Lick Creek.

² Defined as: An area with a much denser population of the species than other parts of the same region.

³ Phil L. Marsh: Personal communication.

⁴ At distances varying from 0 to about 200 feet.

⁵ Also known as the Baltimore & Ohio RR.

At each of the foregoing localities *pennsylvanicus* occurs in considerable abundance and far outnumbers *Mesodon thyroidus* (Say), the only other *Mesodon* inhabiting the right-of-way to any extent.⁶ A preliminary population-count June 28, 1941 and Loc. RR-1 revealed 16 *pennsylvanicus* specimens in an area of about 78 square feet—a population density of roughly one specimen per five square feet. No *thyroidus* were found in the census plot.

Mention must now be made of the second abundance-area, Loc. 2X. This area is located about the Dietrich-Kline Ditch Bridge on the Indianapolis-Greenfield section of the P.C.C. & St. L. Railroad embankment $\frac{1}{16}$ of a mile west of Mitthoefer Road. From the south side of the embankment the population seems to have spread southward into an adjacent woodland—only the northern part being inhabited by the species.

Although it is impossible to offer any explanation as to why *Mesodon pennsylvanicus* should be so abundant in these two areas, it is not amiss to emphasize certain of the more obvious conditions which may be important factors in the problem. These are: (1) the repeated occurrence of a graveled road-bed at the localities; (2) the presence of a stream nearby; (3) the repeated occurrence of relatively undisturbed wooded areas adjacent to the abundance-areas; and (4) the relative absence of other *Mesodon* species in the populated areas (i.e. the high ratio of the *pennsylvanicus* population to that of any other species of the genus). One possible test of the relationship these conditions may have on the occurrence of *pennsylvanicus* abundance-areas would be to attempt to locate other such areas, within the range of the species, at points where these conditions occur.

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⁶ A solitary specimen of *M. elevatus* (Say) has been found at Loc. RR-1.

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MARL DEPOSITS IN BONAVENTURE, NORTH OF BAY CHALEUR, QUEBEC, CANADA, AND IN HOULTON, MAINE

BY OLOF O. NYLANDER

Since the opening of the road from St. Leonards across the north of New Brunswick to Bay Chaleur, I have been able to make a trip there nearly every summer; sometimes even two. My chief object has been to check up on the many publications related to the fossils and to collect specimens for my collection, and to take photographs of the most important places.

On October 19th, 1940, we stopped at a place along the road to examine a marl deposit that I had noticed in passing by there several times before. This was on a farm belonging to a Mr. Leazari Henry, in east Bonaventure, north of Bay Chaleur. The day was cold and windy, and our time limited, so I could not spend the time to give the subject all the attention it should have had. The marl deposit is 12 feet thick, (overlaid by two feet of peat) which has been worked for 17 years. The marl is sold to farmers for 50¢ a yard and is used for improving the land. The marl is largely deposited by algae with some remains of fresh water shells. In the top layer of the marl are many large fresh water snails, *Lymnaea stagnalis* L., in a good state of preservation.

Fossaria umbilicata, C. B. Adams, rather scarce.

Helisoma trivolvis Say, 7 specimens.

Gyraulus parvus Say, common.

Sphaerium sulcatum Lam, 1 partly preserved.

Pisidium, 1 large specimen of a species not seen before.

This deposit is remarkable because *L. stagnalis* is abundant in the top layer. To my knowledge it has not been found living in